

## Recovery Plan Action Status

**Plan Name: South Florida Multi-Species Recovery Plan (68 spp.)**

**Plan Status: Final**

**Plan Date: 18-May-99**

**Lead Agency: USFWS**

**Lead Office: South Florida Ecological Services Field Office**

**(562-3909)**

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Okeechobee gourd (Cucurbita okeechobeensis ssp. okeechobeensis)	1	cuok-h1.1	Determine water regulation practices that promote recovery of cuok, assess the implications on an ecosystem-wide scale, and make recommendations to water managers.	Not Started			U.S. Army Corps of Engineers, Florida Fish and Wildlife Conservation Commission, Non-governmental organizations, Water Management Districts	Other: Regulations	Labor type not yet selected	Action lead(s): FWS
Okeechobee gourd (Cucurbita okeechobeensis ssp. okeechobeensis)	2	cuok-h1.2	Control or remove exotic vegetation in wetlands in a manner that will avoid impacts to cuok.	Ongoing Current	Prior to FY 1995		Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Non-governmental organizations, Water Management Districts	Management: Predator and Competitor Control	Labor type not yet selected	Cost is per acre (ex. 1.0/acre); Total cost dependent upon number of acres infested with exotics. Action lead(s): WMD, FWC
Okeechobee gourd (Cucurbita okeechobeensis ssp. okeechobeensis)	3	cuok-h1.3	Plant native trees or shrubs to replace exotics.	Ongoing Current	Prior to FY 1995		Florida Fish and Wildlife Conservation Commission, Non-governmental organizations, Water Management Districts	Management: Habitat Maintenance and Manipulation	Labor type not yet selected	Cost is per acre (ex. 10.0/acre); Total cost dependent upon number of acres restored. Action lead(s): WMD, FWC
Okeechobee gourd (Cucurbita okeechobeensis ssp. okeechobeensis)	2	cuok-h1.4	Use controlled burns to open up areas of overly dense vegetation in lake littoral zones and marshes.	Ongoing Current	Prior to FY 1995		Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Non-governmental organizations, Water Management Districts, Private industry, landowners, etc.	Management: Habitat Maintenance and Manipulation	Labor type not yet selected	Cost is per acre (ex. 0.03/acre); Total cost dependent upon number of acres burned. Action lead(s): WMD, FWC

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Okeechobee gourd (Cucurbita okeechobeensis ssp. okeechobeensis)	2	cuok-h1.5	Prevent cultural eutrophication of lakes and marshes.	Ongoing Current	Prior to FY 1995		U.S. Environmental Protection Agency, U.S. Army Corps of Engineers, Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Water Management Districts	Management: Habitat Maintenance and Manipulation	Labor type not yet selected	Action lead(s): WMD, FWC
Okeechobee gourd (Cucurbita okeechobeensis ssp. okeechobeensis)	2	cuok-h2.1	Ensure that habitat needs of cuok are incorporated into restoration of Kreamer, Torrey, and Ritta Islands.	Ongoing Current	Prior to FY 1995		U.S. Army Corps of Engineers, Water Management Districts	Management: Habitat Maintenance and Manipulation	Labor type not yet selected	Task currently implemented and cost is included in managing agency's budget. Action lead(s): FWS
Okeechobee gourd (Cucurbita okeechobeensis ssp. okeechobeensis)	3	cuok-h2.2	Coordinate translocation plans for cuok with the Kissimmee River restoration activities.	Ongoing Current	Prior to FY 1995		U.S. Army Corps of Engineers, Water Management Districts	Management: Reintroduction	Labor type not yet selected	Task currently implemented and cost is included in managing agency's budget. Action lead(s): FWS
Okeechobee gourd (Cucurbita okeechobeensis ssp. okeechobeensis)	2	cuok-h3.0	Research the acute and long-term tolerance of cuok to herbicides used to control nuisance aquatic vegetation.	Not Started			U.S. Environmental Protection Agency, Florida Fish and Wildlife Conservation Commission, Water Management Districts, Private industry, landowners, etc., Public and private universities	Research: Management Techniques	Labor type not yet selected	Action lead(s): FWS
Okeechobee gourd (Cucurbita okeechobeensis ssp. okeechobeensis)	2	cuok-h4.0	Monitor habitat and ecological processes to determine effects on cuok.	Not Started			U.S. Army Corps of Engineers, Florida Fish and Wildlife Conservation Commission, Non-governmental organizations, Water Management Districts, Public and private universities	Research: Ecosystem Studies	Labor type not yet selected	Action lead(s): FWS
Okeechobee gourd (Cucurbita okeechobeensis ssp. okeechobeensis)	3	cuok-h5.0	Increase public awareness of ecological relationships, environmental stressors, and restoration activities in South Florida.	Ongoing Current	Prior to FY 1995		U.S. Army Corps of Engineers, Florida Fish and Wildlife Conservation Commission, Non-governmental organizations, Water Management Districts	Other: Information and Education	Labor type not yet selected	Action lead(s): FWS

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Okeechobee gourd (Cucurbita okeechobeensis ssp. okeechobeensis)	1	cuok-s1.1	Conduct regularly scheduled surveys for cuok.	Ongoing Current	Prior to FY 1995		U.S. Army Corps of Engineers, Florida Fish and Wildlife Conservation Commission, Non-governmental organizations, Water Management Districts, Public and private universities	Research: Population Surveys	Labor type not yet selected	Action lead(s): FWS, WMD
Okeechobee gourd (Cucurbita okeechobeensis ssp. okeechobeensis)	3	cuok-s1.2	Encourage individuals to provide information on sightings of cuok.	Ongoing Current	Prior to FY 1995		U.S. Army Corps of Engineers, Florida Fish and Wildlife Conservation Commission, Water Management Districts	Other: Information and Education	Labor type not yet selected	Action lead(s): FWS
Okeechobee gourd (Cucurbita okeechobeensis ssp. okeechobeensis)	2	cuok-s2.1	Ensure that spraying to control aquatic vegetation does not impact cuok.	Ongoing Current	Prior to FY 1995		U.S. Army Corps of Engineers, Florida Fish and Wildlife Conservation Commission, Water Management Districts	Management: Predator and Competitor Control	Labor type not yet selected	Majority of cost included in WMD and spraying agency's budget. Action lead(s): FWS
Okeechobee gourd (Cucurbita okeechobeensis ssp. okeechobeensis)	2	cuok-s2.2	Assess the effect of Melaleuca and Brazilian pepper control efforts and use techniques to avoid direct impact to cuok.	Not Started			U.S. Geological Survey, Biological Resources Division, Florida Fish and Wildlife Conservation Commission, Non-governmental organizations, Water Management Districts, Public and private universities	Research: Ecosystem Studies	Labor type not yet selected	Action lead(s): WMD, FWC

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Okeechobee gourd (Cucurbita okeechobeensis ssp. okeechobeensis)	2	cuok-s2.3	Use provisions of section 7 of the ESA to protect cuok.	Ongoing Current	Prior to FY 1995		U.S. Bureau of Land Management, U.S. Department of Agriculture, U.S. Geological Survey, Biological Resources Division, U.S. Federal Emergency Management Agency, U.S. Geological Survey, U.S. Environmental Protection Agency, U.S. Army Corps of Engineers, Natural Resources Conservation Service, United States Coast Guard, U.S. Air Force, US Forest Service	Other: Regulations	Internal Administrative	Cost included in standard operating procedures of Federal agency's budget. Action lead(s): All Federal agencies
Okeechobee gourd (Cucurbita okeechobeensis ssp. okeechobeensis)	2	cuok-s2.4.1	Establish a protocol for translocation.	Not Started			Florida Fish and Wildlife Conservation Commission, Non-governmental organizations, Water Management Districts	Research: Reintroduction	Labor type not yet selected	Action lead(s): FWS
Okeechobee gourd (Cucurbita okeechobeensis ssp. okeechobeensis)	2	cuok-s2.4.2	Locate potential translocation sites.	Not Started			Florida Fish and Wildlife Conservation Commission, Non-governmental organizations, Water Management Districts	Research: Reintroduction	Labor type not yet selected	Action lead(s): FWS
Okeechobee gourd (Cucurbita okeechobeensis ssp. okeechobeensis)	2	cuok-s2.4.3	Translocate plants to selected sites.	Not Started			Florida Fish and Wildlife Conservation Commission, Non-governmental organizations, Water Management Districts	Management: Reintroduction	Labor type not yet selected	Action lead(s): FWS
Okeechobee gourd (Cucurbita okeechobeensis ssp. okeechobeensis)	2	cuok-s3.1	Test the viability of cuok seeds submerged for long periods.	Not Started			Non-governmental organizations, Water Management Districts, Public and private universities	Research: Demographic Studies	Labor type not yet selected	Action lead(s): NGO

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Okeechobee gourd (Cucurbita okeechobeensis ssp. okeechobeensis)	3	cuok-s3.2	Characterize range of soil conditions where cuok grows and provide detail mapping of soil types in southeastern Lake Okeechobee.	Not Started			Non-governmental organizations, Water Management Districts, Public and private universities	Research: Ecosystem Studies	Labor type not yet selected	Action lead(s): universities
Okeechobee gourd (Cucurbita okeechobeensis ssp. okeechobeensis)	1	cuok-s3.3	Through field surveys, determine dates of germination under natural conditions.	Not Started			Non-governmental organizations, Water Management Districts, Public and private universities	Research: Propagation	Labor type not yet selected	Action lead(s): NGO
Okeechobee gourd (Cucurbita okeechobeensis ssp. okeechobeensis)	1	cuok-s3.4	Test the effect of seasonally rising water level on the survival of young cuok.	Not Started			Non-governmental organizations, Water Management Districts, Public and private universities	Research: Demographic Studies	Labor type not yet selected	Action lead(s): universities
Okeechobee gourd (Cucurbita okeechobeensis ssp. okeechobeensis)	1	cuok-s3.5	Conduct population viability and risk assessment studies for cuok.	Not Started			Non-governmental organizations, Water Management Districts, Public and private universities	Research: Population Assessment	Labor type not yet selected	Action lead(s): FWS
Okeechobee gourd (Cucurbita okeechobeensis ssp. okeechobeensis)	3	cuok-s3.6	Investigate the role of animals in dispersing cuok seeds.	Not Started			Non-governmental organizations, Water Management Districts, Public and private universities	Research: Ecosystem Studies	Labor type not yet selected	Action lead(s): universities
Okeechobee gourd (Cucurbita okeechobeensis ssp. okeechobeensis)	2	cuok-s3.7	Document the potential relationship between the American alligator and the cuok.	Not Started			Non-governmental organizations, Water Management Districts, Public and private universities	Research: Ecosystem Studies	Labor type not yet selected	Action lead(s): universities
Okeechobee gourd (Cucurbita okeechobeensis ssp. okeechobeensis)	3	cuok-s3.8	Investigate the genetic distance between the two populations of cuok.	Complete	FY 2000 - FY 2004	FY 2000 - FY 2004	Non-governmental organizations, Water Management Districts	Research: Genetics	Contract, Species Expert	Action lead(s): NGO
Okeechobee gourd (Cucurbita okeechobeensis ssp. okeechobeensis)	1	cuok-s4.1	Determine the most effective approach to monitor the condition of cuok and its habitat on an annual basis.	Not Started			Non-governmental organizations, Water Management Districts, Public and private universities	Research: Habitat Status, Research: Population Surveys	Labor type not yet selected	Action lead(s): FWS
Okeechobee gourd (Cucurbita okeechobeensis ssp. okeechobeensis)	1	cuok-s4.2	Conduct monitoring on an annual basis.	Ongoing Current	Prior to FY 1995		Florida Fish and Wildlife Conservation Commission, Non-governmental organizations, Water Management Districts, Public and private universities	Research: Population Surveys	Labor type not yet selected	Action lead(s): FWS

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Okeechobee gourd (Cucurbita okeechobeensis ssp. okeechobeensis)	3	cuok-s5.0	Increase public awareness of cuok.	Ongoing Current	Prior to FY 1995		U.S. Army Corps of Engineers, Florida Fish and Wildlife Conservation Commission, Non- governmental organizations, Florida Division of Forestry, Water Management Districts	Other: Information and Education	Labor type not yet selected	Action lead(s): FWS